Statement of Basis of the Federal Operating Permit

Oxy Vinyls, LP

Site Name: Oxy Vinyls Deer Park Caustic
Area Name: Oxy Vinyls Deer Park PVC/Caustic Plant
Physical Location: 1000 Tidal Rd
Nearest City: Deer Park
County: Harris

Permit Number: O3018
Project Type: Minor Revision

Standard Industrial Classification (SIC) Code: 2821
SIC Name: Plastics Materials

This Statement of Basis sets forth the legal and factual basis for the draft changes to the permit conditions resulting from the minor revision project in accordance with 30 TAC §122.201(a)(4). The applicant has submitted an application for a minor permit revision per §§ 122.215-217. This document may include the following information:

A description of the facility/area process description;
A description of the revision project;
A basis for applying permit shields;
A list of the federal regulatory applicability determinations;
A table listing the determination of applicable requirements;
A list of the New Source Review Requirements;
The rationale for periodic monitoring methods selected;
The rationale for compliance assurance methods selected;
A compliance status; and
A list of available unit attribute forms.

Prepared on: October 14, 2015

Operating Permit
Basis of Determination

Description of Revisions

40 CFR Part 63, Subpart DDDDDD requirements were added for the following units: DPP-102, DPP-57A/B, GRPBLENDTK, GRPCNTRFGE, GRPDRYER, GRPPVCLOAD, GRPVENT, PRE-INCIN, PRO-PVC, GRPPRESTK, and DPC-091. These requirements were previously referenced by Special Term and Condition 13 but that term has now been replaced with unit-specific requirements. Special Term and Condition 1.E was updated to include a reference to 40 CFR Part 63, Subpart DDDDDD. Due to rule overlap between 40 CFR Part 63 and Part 61, requirements under 40 CFR Part 61, Subpart F were removed from DPP-102 and PRO-PVC, and requirements under 40 CFR Part 61, Subpart V were removed from DPP-102.

Permit Area Process Description

The Oxy Vinyls Deer Park Polyvinyl Chloride (PVC)/Caustic Plant includes the PVC production facilities, the dry caustic facilities, two boilers and supporting utilities.

PVC Production:
PVC is manufactured by reacting vinyl chloride monomer (VCM) in a water medium in the presence of a catalyst and various additives. Batches of PVC slurry are then blended together. Most of the unreacted VCM is recycled. Unrecovered VCM and inerts are routed to incinerators at Oxy Vinyls' La Porte VCM Plant for destruction.

Next, residual VCM is steam stripped from the PVC slurry in stripping columns and recycled. After stripping, centrifuges separate most of the water from the PVC slurry. The PVC wet cake is dried by natural gas-fired hot air dryers. Cyclones and water scrubbers separate the PVC resin from the drying air.

The dry PVC resin is screened for removal of fines and oversized particles and transferred to product bins and silos prior to shipment. All product bins and silos are equipped with air filters or baghouses. The final product is shipped in railcars and trucks. PVC is transferred to railroad hopper cars using gravity flow.

Dry Caustic Production:
The plant can produce about 43,800 tons/yr of flake potassium hydroxide (KOH). 45% KOH is delivered by barge to a storage tank. It is concentrated to about 65% in the single effect caustic evaporator, and then it is discharged to the caustic storage tank in the anhydrous plant.

The 65% KOH is further concentrated in the anhydrous caustic evaporators, using Dowtherm as the heating medium. Dowtherm is vaporized in one of two 18 MM Btu/hr natural gas-fired heaters. The Dowtherm handling system includes a pressurized tank, an atmospheric storage tank, and fugitive sources.

The concentrated KOH melt from the anhydrous evaporator is sent to KOH flaker vats. The KOH flaker is a cooling drum that rotates in a vat of molten KOH. A thin film of KOH melt freezes to the surface of the drum, and as the drum rotates, the frozen KOH hardens, cools and is scraped off as large chunks of flakes. The KOH flakes fall into a chute and are reduced in size by picker bars before dropping to the cooling conveyor.

The cooled KOH flakes are sent to the screeners where they are categorized as flakes or crystals. The product is then packaged for shipment. All transfer and packaging points are serviced with a dust collection system that routes airborne particles to the water scrubber.

Boilers and Supporting Utilities:

The two 95-MMBtu/hr steam boilers fire only natural gas and use burners designed to minimize NO_x and CO emissions. The boilers are operated from the PVC control room using a new DCS system. Supporting utilities include wastewater treatment, refrigeration, abrasive blast and other support operations.

FOPs at Site
The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants
The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, NOX, GHGs

Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
    - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
    - Additional Monitoring Requirements
    - New Source Review Authorization Requirements
    - Compliance Requirements
    - Protection of Stratosphere Ozone
    - Permit Location
    - Permit Shield (30 TAC § 122.148)
- Attachments
    - Applicable Requirements Summary
        - Unit Summary
        - Applicable Requirements Summary
    - Additional Monitoring Requirements
    - Permit Shield
    - New Source Review Authorization References
    - Compliance Plan
    - Alternative Requirements
- Appendix A

- Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra

monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it

would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.

3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
DPC-091	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	UNIT TYPE = EMISSION UNIT TECHNICAL INFORMATION/UNIT DESCRIPTION = COOLING TOWER (HEAT EXCHANGE SYSTEM)	The rule citations were determined from an analysis of the rule text and the basis of determination.
DPP-102	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	UNIT TYPE = EMISSION UNIT TECHNICAL INFORMATION/UNIT DESCRIPTION = PVC PROCESS FUGITIVES	The rule citations were determined from an analysis of the rule text and the basis of determination.
F-DP-M01A	30 TAC Chapter 111, Visible Emissions	R1111-Y-PAINT	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	Unit is subject to 30 TAC § 111.111(a)(8)(A). Customized periodic monitoring was created using the text from Special Term and Condition 3.C.iii.1-4 with the addition of the following sentence "The determination of visible emissions shall be made at the nearest property line downwind of the source or within 500 feet of the source, whichever is closer to the source."
F-DP-M01B	30 TAC Chapter 111, Visible Emissions	R1111-SW-PAINT	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	Unit is subject to 30 TAC § 111.111(a)(8)(A). Customized periodic monitoring was created using the text from Special Term and Condition 3.C.iii.1-4 with the addition of the following sentence "The determination of visible emissions shall be made at the nearest property line downwind of the source or within 500 feet of the source, whichever is closer to the source."
F-DP-M02A	30 TAC Chapter 111, Visible Emissions	R1111-Y-BLAST	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	Unit is subject to 30 TAC § 111.111(a)(8)(A). Customized periodic monitoring was created using the text from Special Term and Condition 3.C.iii.1-4 with the addition of the following sentence "The determination of visible emissions shall be made at the nearest property line downwind of the source or within 500 feet of the source, whichever is closer to the

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
				source."
F-DP-M02B	30 TAC Chapter 111, Visible Emissions	R1111-SW-BLAST	UNIT TYPE = EMISSION UNIT FUNCTIONALLY IDENTICAL REPLACEMENT [REG VII] = UNIT IS NOT FUNCTIONALLY IDENTICAL REPLACEMENT (DATE CONSTRUCTED/PLACED IN SERVICE = '92+')	Unit is subject to 30 TAC § 111.111(a)(8)(A). Customized periodic monitoring was created using the text from Special Term and Condition 3.C.iii.1-4 with the addition of the following sentence "The determination of visible emissions shall be made at the nearest property line downwind of the source or within 500 feet of the source, whichever is closer to the source."
GRPPRESTK	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	UNIT TYPE = EMISSION UNIT TECHNICAL INFORMATION/UNIT DESCRIPTION = STORAGE TANK	The rule citations were determined from an analysis of the rule text and the basis of determination.
PRO-PVC	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	UNIT TYPE = PROCESS TECHNICAL INFORMATION/UNIT DESCRIPTION = PVC PRODUCTION PROCESS	The rule citations were determined from an analysis of the rule text and the basis of determination.
CTRAIL-1	30 TAC Chapter 117, Subchapter B	R7310-STANDBY	Fuel Flow Monitoring = Unit is a diesel engine operating with a run time meter and using monthly fuel use records maintained for each engine per 30 TAC §§ 117.140(a)(2)(C), 117.340(a)(2)(C) or 117.440(a)(2)(C). NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(9) CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 3 g/hp-hr option CO Averaging Method = Complying with the applicable emission limit using a block one-hour average. CO Monitoring System = Emissions monitored by means other than a CEMS or PEMS. EGF System Cap Unit = Engine is not used as an electric generating facility to generate electricity for sale to the electric grid. Type of Service = SRIC engine not meeting an exemption Fuel Fired = Petroleum-based diesel fuel NOx Averaging Method = Complying with the applicable emission limit using a block one-hour average. Engine Type = Lean-burn NOx Reduction = None ESAD Date Placed in Service = Placed into service before October 1, 2001 and has not been modified, reconstructed or relocated on or after October 1, 2001. NOx Monitoring System = Maximum emission rate testing in accordance with 30 TAC § 117.8000 Diesel HP Rating = Horsepower rating is 25 hp or greater, but less than 50 hp.	Monitoring/Testing - The following citations were removed for both NOx and CO since they are not applicable to engines used only in emergency situations: § 117.8140(a), (a)(1), (a)(2) § 117.8140(a)(2)(A) [G]§ 117.8140(a)(2)(B) The following citation was added for both NOx and CO since it includes the exemption for engines used only in emergency situations: § 117.8140(a)(3) The following citations were removed for CO since they are only applicable to units listed in 117.340(c)(1) (as explained in 117.340(e)): § 117.8120, (2), [G](2)(A) § 117.8120(2)(B)
CTRAIL-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp less than 100 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Service Type = Normal use. Stationary RICE Type = Compression ignition engine	
DCOM-2	30 TAC Chapter 117, Subchapter B	R7303-DCOM-2	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
DCOM-2	40 CFR Part 60, Subpart IIII	60IIII-1	Stationary CI Engine = Unit is a stationary compression ignition engine	
DCOM-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than 500. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.	
EGEN-1	30 TAC Chapter 117, Subchapter B	R7303-EGEN-1	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel	
EGEN-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Stationary RICE Type = Compression ignition engine	
EGEN-2	30 TAC Chapter 117, Subchapter B	R7303-EGEN-2	Type of Service = New, modified, reconstructed or relocated diesel fuel-fired engine, placed into service on or after October 1, 2001, located in the Houston/Galveston/Brazoria ozone nonattainment area, operated less than 100 hours/year, on a rolling 12-month average	
EGEN-2	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than or equal to 100 and less than 250 hp. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Stationary RICE Type = Compression ignition engine	
EGEN-3	30 TAC Chapter 117, Subchapter B	R7303-EGEN-3	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Natural gas	
EGEN-3	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp less than 100 hp. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Stationary RICE Type = 4 stroke spark ignited lean burn engine.	
FWP-1	30 TAC Chapter 117, Subchapter B	R7303-EMERG	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)]	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Fuel Fired = Petroleum-based diesel fuel	
FWP-1	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than or equal to 250 hp and less than 300 hp. Construction/Reconstruction Date = Commenced construction or reconstruction on or after December 19, 2002, but before June 12, 2006. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Stationary RICE Type = Compression ignition engine	
GRPENGINE	30 TAC Chapter 117, Subchapter B	R7303-EMERG	Type of Service = Used exclusively in emergency situations [claiming the emergency service exemption under 30 TAC §§ 117.103(a)(6)(D), 117.203(a)(6)(D), 117.303(a)(6)(D) or 117.403(a)(7)(D)] Fuel Fired = Petroleum-based diesel fuel	
GRPENGINE	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-1	Brake HP = Stationary RICE with a brake hp greater than or equal to 250 hp and less than 300 hp. Construction/Reconstruction Date = Commenced construction or reconstruction before December 19, 2002. Nonindustrial Emergency Engine = Stationary RICE is not defined in 40 CFR §63.6675 as a residential emergency RICE, a commercial emergency RICE, or an institutional emergency RICE. Stationary RICE Type = Compression ignition engine	
T-1	30 TAC Chapter 115, Storage of VOCs	R5112-GASOLINE	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank using a submerged fill pipe True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia Product Stored = Gasoline from a storage container in motor vehicle fuel dispensing service (as defined in 30 TAC Chapter 115) Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons	
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5212-LOW-VP	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only unloading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
DPC-032A	30 TAC Chapter 117, Subchapter B	R7ICI-32A	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average NOx Reduction = No NO_x control method Fuel Type #1 = Natural gas	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)	
DPC-032B	30 TAC Chapter 117, Subchapter B	R7ICI-32B	Diluent CEMS = The process heater does not use a carbon dioxide CEMS to monitor diluent. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). Unit Type = Process heater CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option Maximum Rated Capacity = Maximum rated capacity is at least 2 MMBtu/hr, but less than 40 MMBtu/hr. CO Monitoring System = Emissions are monitored using methods other than CEMS or PEMS. NOx Emission Limit Basis = Emission limit basis is not a 30 day rolling average or a block one-hour average NOx Reduction = No NO_x control method Fuel Type #1 = Natural gas NOx Monitoring System = Maximum emission rate testing [in accordance with 30 TAC § 117.8000] NOx Emission Limitation = Title 30 TAC §§ 117.310(d)(3) and 117.310(a)(8)	
GRPBOILER	30 TAC Chapter 117, Subchapter B	R7ICI-BOILER	NOx Emission Limitation = Title 30 TAC § 117.310(d)(3) [relating to mass emissions cap and trade in 30 TAC Chapter 101, Subchapter H, Division 3 and Emission Specifications for Attainment Demonstration]. Unit Type = Other industrial, commercial, or institutional boiler. Maximum Rated Capacity = MRC is greater than or equal to 40 MMBtu/hr but less than 100 MMBtu/hr. NOx Monitoring System = Maximum emission rate testing. Fuel Flow Monitoring = Fuel flow is monitored with a totalizing fuel flow meter per 30 TAC §§ 117.140(a), 117.340(a) or 117.440(a). CO Emission Limitation = Title 30 TAC § 117.310(c)(1) 400 ppmv option. CO Monitoring System = Monitored by method other than CEMS or PEMS. EGF System Cap Unit = The unit is not used as an electric generating facility to generate electricity for sale to the electric grid. Fuel Type #1 = Natural gas. NOx Reductions = No NO_x reduction. Annual Heat Input = Annual heat input is greater than $2.8(10^{11})$ Btu/yr, based on rolling 12-month average.	Monitoring/Testing - § 117.8120(2)(B) was removed for CO. This citation specifies that CO monitoring should be conducted in conjunction with any NOx relative accuracy test audit (RATA), but since GRPBOILER does not use a NOx CEMS, a RATA would never be conducted.
GRPBOILER	40 CFR Part 60, Subpart Dc	60DC-BOILER	Construction/Modification Date = After June 9, 1989 but on or before February 28, 2005. PM Monitoring Type = No particulate monitoring. Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW). SO2 Inlet Monitoring Type = No SO_2 monitoring. Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB. SO2 Outlet Monitoring Type = No SO_2 monitoring. Heat Input Capacity = Heat input capacity is greater than 75 MMBtu/hr (22 MW).	Reporting - § 60.48c(j) was removed for all pollutants (SO_2, PM, and Opacity). There are no ongoing reports that must be submitted for the units in GRPBOILER.

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Technology Type = None. D-Series Fuel Type = Natural gas. ACF Option - SO2 = Other ACF or no ACF. ACF Option - PM = Other ACF or no ACF. 30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner.	
DPC-035	30 TAC Chapter 111, Visible Emissions	R1111-KOHSCRUB	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
DPC-039	30 TAC Chapter 115, Vent Gas Controls	R5121-DOWTHERM	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
DPP-57A/B	30 TAC Chapter 115, Vent Gas Controls	R5121-REACTOR	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
DPP-57A/B	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Process Vent	The rule citations were determined from an analysis of the rule text and the basis of determination.
EGEN-1	30 TAC Chapter 111, Visible	R1111-EGEN-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Emissions		Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
FWP-1	30 TAC Chapter 111, Visible Emissions	R1111-GRPENG	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
GRPBLENDTK	30 TAC Chapter 115, Vent Gas Controls	R5121-BLENDTK	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
GRPBLENDTK	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Process Vent	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPCNTRFGE	30 TAC Chapter 115, Vent Gas Controls	R5121-CENTRFGE	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRPCNTRFGE	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Process Vent	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPDRYER	30 TAC Chapter 115, Vent Gas Controls	R5121-DRYER	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
GRPDRYER	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Process Vent	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPENGINE	30 TAC Chapter 111, Visible Emissions	R1111-GRPENG	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = On or before January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
GRPPVCLOAD	30 TAC Chapter 115, Vent Gas Controls	R5121-LOAD	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
GRPPVCLOAD	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Process Vent	The rule citations were determined from an analysis of the rule text and the basis of determination.
GRPVENT	30 TAC Chapter 115, Vent Gas	R5121-SILO	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Controls		Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
GRPVENT	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Process Vent	The rule citations were determined from an analysis of the rule text and the basis of determination.
GWTR-STRIP	30 TAC Chapter 115, Vent Gas Controls	R5121-REMED	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
PRE-INCIN	30 TAC Chapter 115, Vent Gas Controls	R5121-INCIN	Alternate Control Requirement = Alternate control is not used. Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2. Control Device Type = Direct flame incinerator in which the vent gas stream is burned at a temperature or at least 1300° F (704 C). Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule.	
PRE-INCIN	40 CFR Part 63, Subpart DDDDDD	63DDDDDD-HAP	Unit Type = Emission Point Technical Information/Unit Description = Closed-Vent System and Control Device	The rule citations were determined from an analysis of the rule text and the basis of determination.
TANK-9	30 TAC Chapter 115, Vent Gas Controls	R5121-WWATER	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is not from a combustion unit exhaust or the combustion unit is used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Vent Type = Title 30 TAC Chapter 115, Subchapter B, Vent Gas Control rules are applicable and the vent is not specifically classified under the rule. Combined 24-Hour VOC Weight = Combined VOC weight is less than or equal to 100 pounds (45.4 kg). VOC Concentration/Emission Rate @ Max Operating Conditions = The VOC concentration or emission rate is less than the applicable exemption limit at maximum actual operating conditions and the alternate recordkeeping requirements of 30 TAC § 115.126(4) are being selected.	
DG-2	30 TAC Chapter 115, Degreasing Processes	R5412-CLEAN	Solvent Degreasing Machine Type = Cold solvent cleaning machine. Alternate Control Requirement = The TCEQ Executive Director has not approved an alternative control requirement as allowed under 30 TAC § 115.413 or not alternative has been requested. Solvent Sprayed = A solvent is sprayed. Solvent Vapor Pressure = Solvent vapor pressure is less than or equal to 0.6 psia as measured at 100 degrees Fahrenheit. Solvent Heated = The solvent is not heated to a temperature greater than 120° F. Parts Larger than Drainage = Cleaned parts for which the machine is authorized to clean are larger than the internal drainage facility of the machine. Drainage Area = Area is greater than or equal to 16 square inches. Disposal in Enclosed Containers = Waste solvent is properly disposed of in enclosed containers.	
PA-1	30 TAC Chapter 115, Subchapter E, Division 5	R5450-EXEMPT	Coating Used = The VOC content of the coating used is stated in terms of lb VOC/gallon of coating. Exemption = No exemption is being met. 90% Vapor Control = The process is not using a vapor control system capable of achieving a 90% control efficiency. Alternative Control = No alternative control is being used. Vapor Control = A vapor control device is not used to meet the VOC emission limits. Drying Method = Applied coating is air dried. Low Usage = Surface coating operations do not meet any of the above exemptions. Application System = The surface coating or surface coating process used is specified in §115.451(f)(1)-(7). Process Type = Miscellaneous metal parts surface coating process.	
PA-1	30 TAC Chapter 115, Subchapter E, Division 5	R5450-NORMAL	Coating Used = The VOC content of the coating used is stated in terms of lb VOC/gallon of coating. Exemption = No exemption is being met. 90% Vapor Control = The process is not using a vapor control system capable of achieving a 90% control efficiency. Alternative Control = No alternative control is being used. Vapor Control = A vapor control device is not used to meet the VOC emission limits. Drying Method = Applied coating is air dried. Low Usage = Surface coating operations do not meet any of the above exemptions. Application System = The surface coating or surface coating process is not specified in §155.451(f)(1)-(7). Process Type = Miscellaneous metal parts surface coating process.	
PA-1	30 TAC Chapter 115, Surface	R5420-AIRDRY	Alternate Requirements = No alternate requirement to 30 TAC §§ 115.421(a)(9) or 115.421(b)(8) has been approved or no alternate has been requested.	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	Coating Operations		Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested. Facility Operations = Other miscellaneous metal parts and products coating. Miscellaneous Coating Type = A coating that is low-bake, or utilizes air or forced air driers. VOC Emission Rate = Uncontrolled emission rates not qualifying for exemption from control. Vapor Recovery = No vapor recovery system is used to control emissions.	
PA-1	30 TAC Chapter 115, Surface Coating Operations	R5420-EXTREME	Alternate Requirements = No alternate requirement to 30 TAC §§ 115.421(a)(9) or 115.421(b)(8) has been approved or no alternate has been requested. Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested. Facility Operations = Other miscellaneous metal parts and products coating. Miscellaneous Coating Type = Extreme performance coating, including chemical milling maskants. VOC Emission Rate = Uncontrolled emission rates not qualifying for exemption from control. Vapor Recovery = No vapor recovery system is used to control emissions.	
PA-1	30 TAC Chapter 115, Surface Coating Operations	R5420-OTHER	Alternate Requirements = No alternate requirement to 30 TAC §§ 115.421(a)(9) or 115.421(b)(8) has been approved or no alternate has been requested. Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested. Facility Operations = Other miscellaneous metal parts and products coating. Miscellaneous Coating Type = Coating type other than low-bake coatings, coating using air or forced air dryers, extreme performance and clear coat/interior protective coating for pails and drums. VOC Emission Rate = Uncontrolled emission rates not qualifying for exemption from control. Vapor Recovery = No vapor recovery system is used to control emissions.	

* - The “unit attributes” or operating conditions that determine what requirements apply
** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 110B	Issuance Date: 04/24/2007
Authorization No.: 4673B	Issuance Date: 10/24/2011
Authorization No.: 48356	Issuance Date: 01/31/2013
Authorization No.: 70266	Issuance Date: 04/20/2009
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.227	Version No./Date: 09/04/2000
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.265	Version No./Date: 09/04/2000
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.373	Version No./Date: 09/04/2000
Number: 106.412	Version No./Date: 09/04/2000
Number: 106.433	Version No./Date: 09/04/2000
Number: 106.454	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.473	Version No./Date: 09/04/2000

Number: 106.474	Version No./Date: 09/04/2000
Number: 106.511	Version No./Date: 09/04/2000
Number: 106.533	Version No./Date: 06/30/2004
Number: 5	Version No./Date: 09/17/1973
Number: 5	Version No./Date: 10/04/1995
Number: 6	Version No./Date: 11/25/1985
Number: 57	Version No./Date: 09/23/1982
Number: 63	Version No./Date: 09/23/1982
Number: 107	Version No./Date: 03/15/1985

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: DG-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Degreasing Processes	SOP Index No.: R5412-CLEAN
Pollutant: VOC	Main Standard: § 115.412(1)
Monitoring Information	
Indicator: Visual Inspection	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: Noncompliance with 30 TAC § 115.412(1)(A), (C), (D), or (F)	
Basis of monitoring: The monitoring option to cover cold cleaner or the open-top vapor cleaner was included in the EPA "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources. In addition to covering the cleaner records of monthly inspections of equipment is an effective way to ensure that the system is operating in accordance with its design.	

Unit/Group/Process Information	
ID No.: DPC-035	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-KOHSCRUB
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions without performing Test Method 9 or if the result of Test Method 9 is an opacity above 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: EGEN-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-EGEN-1
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions without performing Test Method 9 or if the result of Test Method 9 is an opacity above 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: F-DP-M01A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-Y-PAINT
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for paint operations.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: F-DP-M01B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SW-PAINT
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for paint operations.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: F-DP-M02A	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-Y-BLAST
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for abrasive blast operations.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: F-DP-M02B	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SW-BLAST
Pollutant: PM (OPACITY)	Main Standard: § 111.111(a)(8)(A)
Monitoring Information	
Indicator: Visible emissions	
Minimum Frequency: Quarterly	
Averaging Period: n/a	
Deviation Limit: Opacity limit of 30% for abrasive blast operations.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: FWP-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-GRPENG
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions without performing Test Method 9 or if the result of Test Method 9 is an opacity above 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: GRPBOILER	
Control Device ID No.: FGR	Control Device Type: Flue Gas Recirculation
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-BOILER
Pollutant: CO	Main Standard: § 117.310(c)(1)
Monitoring Information	
Indicator: CO Concentration	
Minimum Frequency: Monthly	
Averaging Period: n/a	
Deviation Limit: 400 ppmv at 3.0% O2, dry basis, hourly average	
Basis of monitoring: It is accepted practice to measure pollutant concentrations with colorimetric detector tubes, also referred to as stain tubes. The measured concentration along with stack flow rate or AP-42 factors and fuel consumption records may be used to demonstrate compliance with an underlying emission limit or standard. With regard to CO monitoring, if the CO concentration is too high it shows that a control device such as a catalytic converter is not functioning properly or an emission unit is not obtaining complete combustion. The use of stain tubes to measure pollutant concentrations is documented in federal and state rules including 40 CFR Part 60, Subparts J, Ja, and KKKK, 40 CFR Part 63, Subpart M, and 30 TAC Chapter 117. In addition, it is widely practiced and accepted to calibrate and use a portable analyzer to measure CO concentration with procedures such as EPA Test Method 10 or a CO CEMS.	

Unit/Group/Process Information	
ID No.: GRPBOILER	
Control Device ID No.: FGR	Control Device Type: Flue Gas Recirculation
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 117, Subchapter B	SOP Index No.: R7ICI-BOILER
Pollutant: NO_X	Main Standard: § 117.310(d)(3)
Monitoring Information	
Indicator: Combustion Temperature and Oxygen Concentration	
Minimum Frequency: Four times per hour for one hour per week	
Averaging Period: Hourly	
Deviation Limit: Any two or more consecutive hourly averages of temperature outside the range of 375-540 °F and/or oxygen concentration outside the range of 2.5-6.0 %.	
Basis of monitoring: A common way to reduce NOx emissions without a control device is to mix flue gas with fresh air to lower the combustion chamber temperature. The optimum ratio of flue gas to fresh air for NOx reduction may be determined based on manufacturer's specifications or a recent performance test. A facility may monitor NOx concentration, the ratio of fresh air to flue gas (flow rate), the temperature in the combustion chamber, oxygen concentration in exhaust gas or the fan motor current to demonstrate compliance with an underlying emission limitation or standard.	

Unit/Group/Process Information	
ID No.: GRPENGINE	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-GRPENG
Pollutant: OPACITY	Main Standard: § 111.111(a)(1)(A)
Monitoring Information	
Indicator: Visible Emissions	
Minimum Frequency: once per quarter	
Averaging Period: n/a	
Deviation Limit: Observation of visible emissions without performing Test Method 9 or if the result of Test Method 9 is an opacity above 30%.	
Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: T-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-GASOLINE
Pollutant: VOC	Main Standard: § 115.112(d)(1)
Monitoring Information	
Indicator: Structural integrity of fill pipe	
Minimum Frequency: When emptied and degassed	
Averaging Period: n/a	
Deviation Limit: It shall be considered a deviation if inspection of the fill pipe indicates that the structural integrity is in question and required repairs are not completed prior to refilling the storage vessel.	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Unit/Group/Process Information	
ID No.: T-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-GASOLINE
Pollutant: VOC	Main Standard: § 115.112(d)(1)
Monitoring Information	
Indicator: Liquid level	
Minimum Frequency: Before each filling operation	
Averaging Period: n/a	
Deviation Limit: Fill pipe not submerged in liquid	
Basis of monitoring: The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.	

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes
OP-UA3 - Storage Tank/Vessel Attributes
OP-UA4 - Loading/Unloading Operations Attributes
OP-UA5 - Process Heater/Furnace Attributes
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes
OP-UA7 - Flare Attributes
OP-UA8 - Coal Preparation Plant Attributes
OP-UA9 - Nonmetallic Mineral Process Plant Attributes
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes
OP-UA11 - Stationary Turbine Attributes
OP-UA12 - Fugitive Emission Unit Attributes
OP-UA13 - Industrial Process Cooling Tower Attributes
OP-UA14 - Water Separator Attributes
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes
OP-UA16 - Solvent Degreasing Machine Attributes
OP-UA17 - Distillation Unit Attributes
OP-UA18 - Surface Coating Operations Attributes
OP-UA19 - Wastewater Unit Attributes
OP-UA20 - Asphalt Operations Attributes
OP-UA21 - Grain Elevator Attributes
OP-UA22 - Printing Attributes
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes
OP-UA25 - Synthetic Fiber Production Attributes
OP-UA26 - Electroplating and Anodizing Unit Attributes
OP-UA27 - Nitric Acid Manufacturing Attributes
OP-UA28 - Polymer Manufacturing Attributes
OP-UA29 - Glass Manufacturing Unit Attributes
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes
OP-UA31 - Lead Smelting Attributes
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes
OP-UA33 - Metallic Mineral Processing Plant Attributes
OP-UA34 - Pharmaceutical Manufacturing
OP-UA35 - Incinerator Attributes
OP-UA36 - Steel Plant Unit Attributes
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes
OP-UA39 - Sterilization Source Attributes
OP-UA40 - Ferroalloy Production Facility Attributes
OP-UA41 - Dry Cleaning Facility Attributes
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes
OP-UA43 - Sulfuric Acid Production Attributes
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes
OP-UA45 - Surface Impoundment Attributes
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes

OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/Depainting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes